

WHAT IS CLAIMED IS:

1. An element coupling condition detecting device for slide fastener element rows which is disposed at a carrying path of a fastener chain for detecting a coupling of right and left elements located adjacent an end of a space in the fastener chain where the elements are missing, wherein the device comprises:

a chain stopping means for stopping transportation of the fastener chain at a detecting position of the right and left elements; and

a detecting portion having a mechanical detecting means for detecting presence/absence of a deviation in coupling of the right and left elements when the fastener chain is stopped.

2. The element coupling condition detecting device according to claim 1, wherein the detecting portion comprises:

an element position detection member which moves between a preliminarily set first contact position of at least one element of the right and left elements and a second contact position deviated from the first contact position, when the fastener chain is stopped; and

a determining portion which determines that it is normal when the element position detection member exists at the first contact position while it determines that it is abnormal when the element position detection member exists at the second contact position.

3. The element coupling condition detecting device

according to claim 2, wherein the element position detection member is constituted of a first detection member and a second detection member provided with a gap between them so that the first and second detection members can contact the right and left elements while the first detection member is disposed in an upstream of the fastener chain with respect to the second detection member such that they are deviated by a pitch of a single element.

4. The element coupling condition detecting device according to claim 2, wherein the element position detection member has first and second moving means capable of advancing/retracting with respect to the first contact position.

5. The element coupling condition detecting device according to claim 4, further comprising a photoelectric detector for detecting an advancement/retraction position of the element position detection member when the element position detection member advances/retracts.

6. The element coupling condition detecting device according to claim 2, wherein the element position detection member is constituted to wait at the first contact position before the fastener chain is stopped and to be movable between the first and second contact positions.

7. The element coupling condition detecting device according to claim 6, further comprising a proximity switch for

detecting a moving position of the element position detection member when the element position detection member moves between the first and second contact positions.